


<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/753,298	TRAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tuan T. Nguyen	2824	

**-- Th MAILING DATE of this communication appears on the cover sheet with th correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Preliminary Amendment filed on 1/8/04.
2. ☒ The allowed claim(s) is/are 7-20.
3. ☒ The drawings filed on 08 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date ____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date ____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input checked="" type="checkbox"/> Other <u>Attachment A: Search History.</u></li> </ol> |
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### **DETAILED ACTION**

1. Claims 1-6 have been canceled by the Applicant as in the Preliminary Amendment filed on 1/8/04.

#### ***Allowable Subject Matter***

2. Claims 7-20 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The prior art of record fail to disclose a method of calibrating a memory device, the memory device comprising an array of memory cells, a plurality of first conductors and a plurality of second conductors, the method comprising detecting a temperature of the memory device; determining whether the temperature of the memory device has changed by at least a threshold value; and updating at least one write current value if the temperature of the memory device changed by at least the threshold value as recited in claims 7-17.

The prior art of record further fail to disclose a method of filling a table with write current values for use in calibrating a memory device, wherein the write current values are associated with temperature values, the memory device comprising an array of memory cells, a plurality of first conductors and a plurality of second conductors, the method comprising (a) applying a first write current and a second write current to conductors crossing at a reference memory cell when the memory array is at a temperature; (b) detecting a state of the reference memory cell; (c) increasing the first write current and the second write current if the state of the reference memory cell does not change; repeating steps a-c until the state of the reference memory cell changes from a first state to a second state; and storing the first write current value and the second write current value that cause the state of the reference memory cell to change,

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wherein the first and second write current values are associated with the temperature as recited in claims 18-20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Nguyen whose telephone number is (571) 272-1880. The examiner can normally be reached on Mon-Thu-Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 1, 2004



Tuan T. Nguyen  
Patent Examiner  
Art Unit 2824



**VAN THU NGUYEN**  
**PRIMARY EXAMINER**

# ATTACHMENT A: SEARCH HISTORY

L Number	Hits	Search Text	DB	Time stamp
17	280	method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:20
18	79	(method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect same temperature)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:20
19	121	(method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:27
20	59	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and (determin\$3 same (temperature with change))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:21
22	1	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and (determin\$3 same (temperature with change)) and (updat\$3 same (write with current))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:22
23	2	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and (determin\$3 same (temperature with change))) and (updat\$3 same current)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:22
21	7	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and (determin\$3 same (temperature with change))) and (threshold same value)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:23
24	5	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and (determin\$3 same (temperature with change))) and 365/\$7.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:24
25	0	6577549.URPN.	USPAT	2004/06/01 09:26
26	0	6577549.URPN.	USPAT	2004/06/01 09:26
27	3	("5784328"   "6069821"   "6385082").PN.	USPAT	2004/06/01 09:26
28	8	("5640343"   "5650958"   "5946227"   "6114719"   "6163477"   "6166948"   "6191972"   "6272036").PN.	USPAT	2004/06/01 09:26
29	8	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and 365/\$7.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:33
30	80	((method and calibrat\$3 and memory and array and cell\$1 and (first same conductor\$1) and (second same conductor\$1)) and (detect\$3 same temperature)) and (reference same cell\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 09:33